

SPECIFICATION

(TENTATIVE)

Product Name : IGBT Module (Power Integrated Module)

Type Name : 7MBR15PE120

Spec. No. : **MT6M1816**

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Fuji Electric Co., Ltd. (Matsumoto Factory)

This specification is subject to change without notice.

	DATE	NAME	APPROVED		Fuji Electric Co., Ltd.
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CHECKED	Mar. - 6 - '97	S. Miyasaka			
REVISIONS			S.K.	DWG. NO.	MT6M1816 1/5

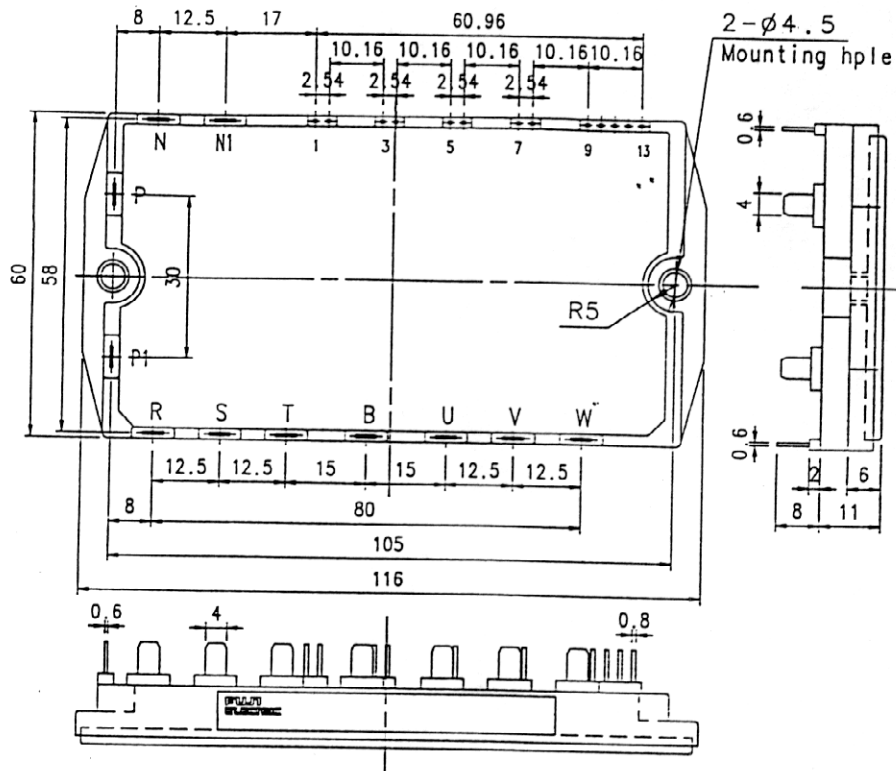
7 M B R 1 5 P E 1 2 0

(TENTATIVE)

1. Outline Drawing

Unit : mm

*Isolation Voltage (Terminal to Case) : AC 2500V 1 minute



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3. Absolute Maximum Ratings (Tc=25°C unless without specified)

Items		Symbols	Conditions	Maximum Ratings	Units
Inverter	Collector-Emitter Voltage	V _{CES}		1200	V
	Gate-Emitter Voltage	V _{GES}		±20	V
	Collector Current	I _C	Continuous	15	A
		I _{CP}	1ms	30	A
		-I _C		15	A
	Collector Power Dissipation	P _C	1 device	120	W
Brake	Collector-Emitter Voltage	V _{CES}		1200	V
	Gate-Emitter Voltage	V _{GES}		±20	V

4. Electrical Characteristics (T_j=25°C unless without specified)

Characteristics		Symbols	Conditions	min.	max.	Units
Inverter	Zero gate voltage collector current	I _{CEs}	V _{CE} =1200V V _{GE} = 0V		1.0	mA
	Gate-emitter leakage current	I _{GES}	V _{CE} = 0V V _{GE} =±20V		200	nA
	Gate-emitter threshold voltage	V _{GE(th)}	V _{CE} =20V I _C =15mA	6.0	9.0	V
	Collector-emitter saturation Voltage	V _{CE(sat)}	V _{GE} =15V I _C =15A		3.0	V
	Collector-Emitter Voltage	-V _{CE}	-I _C =15A		3.0	
	Input capacitance	C _{ies}	V _{GE} =0V V _{CE} =10V f=1MHz	2400 (typ.)		pF
	Switching Time</					

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Characteristics		Symbols	Conditions	min.	max.	Units
Converter	Forward Voltage	V_{FM}	$I_F = 25A$		1.5	V
	Reverse Current	I_{RRM}	$V_R = 1600V$		1	mA
Thermistor						

5. Thermal Characteristics

Characteristics	Symbols	Conditions	min.	max.	Units
Thermal Resistance (1 device)	$R_{th(j-c)}$	Inverter IGBT		1.04	$^{\circ}C/W$
		Inverter FRD		2.78	
		Brake IGBT		1.43	